REMARKS

Telephone Interview

Applicant's attorneys wish to thank the Examiner for his courtesy and time during a telephone interview that was held on February 26th, 2010. The Examiner's comments and insight were very helpful in preparing this response. It is hoped that the comments below reflect the spirit of the interview.

35 U.S.C. § 112

The Examiner rejected claims 1, 4-8, and 17-20 under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement.

In particular, the Examiner objected to the phrase "the at least one parameter to vary differently then before.", stating that the specification does not provide any method, algorithm and/or control structure for one of ordinary skill in the art to determine if the parameter varies differently than before.

In order to overcome this rejection, the applicant has amended independent claims 1 and 17 to include, "measuring an initial measurement of a first parameter of a trainable subject", and "measuring an initial measurement of at least one first parameter" respectively. Support for these amendments may be found in Fig. 4 of the application. These "initial measurements" create a baseline or starting point for the calculations in the rest of the independent claims.

Applicant has further amended claims 1 and 17 to read "more rapidly or less rapidly with respect to the second parameter~~differently than before~~" and "vary more rapidly or less rapidly with respect to the at least one second parameter", respectively and deleted the statement "at least one parameter to vary differently then before". Support for this amendment may be found in the specification at page 13, lines 9 and 10. Applicant believes that this amendment provides

a method in order to enable one skilled in the art to compare a current measurement to the "initial measurement" discussed previously in order to determine whether or not the parameter varies "differently".

Additionally, applicant has amended claims 1 and 17 to include "wherein the point of efficiency is determined by repeatedly increasing stress on the trainable subject by controlling the second parameter and then re-measuring the first parameter" and "by changing the at least one second parameter ~~of the performance system~~ to increase stress on the subject, re-measuring the at least one first parameter and repeating the stress increase and re-measuring, until the at least one first parameter ~~of the subject~~ substantially changes beyond a given tolerance function", respectively. Support for these amendments can be found in the specification at Fig. 4. Applicant believes that these amendments help to illustrate that measurement of the first parameter is repeated and therefore there is always a prior measurement to compare the current measurement to, in order to determine whether or not the variation of the measurements is different.

Applicant has also deleted the term "before" in order to remove any ambiguity caused by the term.

Applicant believes that these amendments overcome the 35 U.S.C. 112, paragraph 1 rejection and request that the rejection of claims 1 and 17 be withdrawn, along with the rejections of dependent claims 4-8 and 18-20 as they depend from allowable independent claims.

35 U.S.C. § 103

The Examiner rejected claims 1, 4-8, and 17-20 under 35 U.S.C. 103(a) as being unpatentable over Hall- Tipping (US 5,001,632) and further in view of Stratton et al.

With Regards to Independent Claims 1 and 17

Hall-Tipping describes an exercise device such as an exercise bike that is hooked up to a video game. The video game acts to keep the user exercising at a predetermined heart rate range. The heart rate range is determined by the formula: 70% to 80-85% of 220-the user's age. The user is led by the video game through a warm up, exercise and a cool down. In order to keep the user's heart rate within the given range, the video game either speeds up or slows down the characters in the game. The speed of the user's character is controlled by how fast the user pedals on the bike. If the user's character is pursuing a character in the game, and the user's heart rate drops too low, then the character that the user's character is pursuing may speed up so that the user has to pedal the bike faster.

No where in Hall-Tipping is it suggested that the stress on the user should be increased until the user's heart rate, or first parameter, with respect to the speed of the bike, or second parameter, varies more or less rapidly as described in claims 1 and 17. For example, claim 1 requires "wherein the point of efficiency is determined by repeatedly increasing stress on the trainable subject by controlling the second parameter and then re-measuring the first parameter until just prior to the trainable subject no longer being able to accommodate additional stress and entering a state of inefficiency or exhaustion causing the first parameter to vary more rapidly or less rapidly with respect to the second parameter". Claim 17 states "to increase stress on the subject, re-measuring the at least one first parameter and repeating the stress increase and re-

measuring, until the at least one first parameter substantially changes beyond a given tolerance function; wherein the point of efficiency occurs just prior to the subject no longer being able to accommodate additional stress and entering a state of inefficiency or exhaustion causing the at least one first parameter to vary more rapidly or less rapidly with respect to the at least one second parameter;". Support for these amendments can be found in Fig. 4 of the specification.

Hall-Tipping, on the other hand, monitors the user's heart rate in order to control the user's heart rate. In claim 1, the user's heart rate or the first parameter, which may be the user's heart rate, is allowed to change as more stress is added to the user. There is no cap to how high the user's heart rate or parameter can reach. Instead the physical limits of the user are being tested. Whereas in Hall-Tipping, as described in col. 5, lines 38-42, a predetermined maximum and minimum heart rate based on the user's age is calculated. Then, (see col. 6, lines 9-15) the user's heart rate is monitored in order to keep the user's heart rate within this precalculated range. Should, the user's heart rate leave this range, the villain in the video game that the user is playing while exercising either slows down or speeds up in order to encourage the user to either slow down or speed up in order to maintain their heart rate in the desired range.

Hall-Tipping, also, does not change the predetermined heart rate or parameter range. Instead, everytime the user exercises, the user's heart rate should fall within this same range. It does not matter how physically fit or unfit the user is, the user should be exercising in the range of 70% to 80-85% of 220 minus the user's age. Whereas, claims 1 and 17 both state " repeating the method, wherein the point of efficiency is recalculated and changes each repetition of the method". Therefore, each time the user is trained, as described in claim 1 "training the trainable subject within the range of tolerance of the point of efficiency", or as described in claim 17 "training the subject within said range of tolerance of the point of efficiency so the duration

the subject can maintain the point of efficiency changes;" the user is trained in a different tolerance range. So, as the user's physical, mental or emotional fitness increases, the user's training changes to challenge them. No where in Hall-Tipping is this taught or even suggested. Therefore, independent claims 1 and 17 should be found allowable over Hall-Tipping.

The Stratton et al. reference fails to remedy the shortcomings of Hall-Tipping. Stratton et al. describes an exercise program, wherein the subjects are trained at 50% to 60% of their heart rate reserve at the beginning, and increased to 80% to 85% by the third or fourth month and continue at that level for the remaining time of the training program. (see Page 1649, item "Training Program and Maximal Oxygen Consumption"). The subject is then tested by being placed on a bicycle. The exercise for testing starts at 200 kpm and increases by 200 kpm every 3 minutes until the subject was stopped by exhaustion. (See Page 1649, item "Study Protocol").

Though, the subject is exercised to exhaustion, the subject's training regimen does not change. The subject is still exercised in a predetermined range. It does not matter of the subject's physical fitness increases, the subject is still exercised in the predetermined range. Whereas, claims 1 and 17 both state "repeating the method, wherein the point of efficiency is recalculated and changes each repetition of the method". Therefore, each time the user is trained, as described in claim 1 "training the trainable subject within the range of tolerance of the point of efficiency", or as described in claim 17 "training the subject within said range of tolerance of the point of efficiency so the duration the subject can maintain the point of efficiency changes;" the user is trained in a different tolerance range. Hall-Tipping fails to teach these limitations of claims 1 and 17 and so does the Stratton et al. reference. Therefore, claims 1 and 17 are also patentable over the Stratton et al. reference.

Applicant believes that these amendments and arguments place independent claims 1 and 17 in condition for allowance. Dependent claims 4-8 and 18-20 are patentable because they depend from allowable claims 1 and 17.

Regarding Doctrine of Equivalents

Applicant hereby declares that any amendments herein that are not specifically made for the purpose of patentability are made for other purposes, such as clarification, and that no such changes shall be construed as limiting the scope of the claims or the application of the Doctrine of Equivalents.

Request to Admit the Amendment

Applicant believes that the foregoing amendment, complies with the Examiner's requirement of form and further believes that this amendment, presents the rejected claims in better form for appeal. Pursuant to 37 C.F.R. § 1.116(a), Applicant requests the Examiner admit the amendment.

However, even if the Examiner decides not to admit the amendment under 37 C.F.R. § 1.116(a), Applicant respectfully requests the Examiner admit the amendment pursuant to 37 C.F.R. § 1.116(b). The foregoing amendment is necessary to sufficiently define the invention described in claims 1-8, and provides the necessary details to particularly and distinctly claim the subject matter the applicant regards as his invention. The amendment was not previously presented as it was unintentionally omitted from Applicant's most recent response. Upon these good and sufficient reasons for why the amendment is necessary and was not earlier presented,

Applicants request the Examiner admit the amendment pursuant to either 37 C.F.R. § 1.116(a) or 37 C.F.R. § 1.116(b).

CONCLUSION

Based on the preceding arguments, Applicant respectfully believes that all pending claims and the entire application meet the acceptance criteria for allowance and therefore request favorable action. If the Examiner believes that anything further would be helpful to place the application in better condition for allowance, Applicant invites the Examiner to contact Applicant's representative at the telephone number listed below. It is requested that a two-month extension of time be granted for the filing of this response, and the appropriate extension filing fee of $245 is enclosed herewith. The Director is hereby authorized to charge and/or credit Deposit Account 19-0513.

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